

changed state and to fire event notifications in response thereto, including at least one event notification when a network connection is established, a registration mechanism for clients to register for notification of one or more types of events, including at least one client registered for network connectivity event notification, and a distribution mechanism that communicates a fired event notification to each client registered for notification thereof based on the type of event notification.

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cont

2. (Amended) The system of claim 1 wherein the registration mechanism and distribution mechanism are incorporated in a loosely coupled events database including an event class object, and wherein the central service is a publisher and each client is a subscriber.

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5. (Amended) The system of claim 3 wherein the registration mechanism and distribution mechanism are incorporated in a loosely coupled events database including an event class object.

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10. (Amended) The system of claim 1 wherein the central service includes a plurality of time-based caches for caching network information, and a mechanism for evaluating differences between at least two of the caches to determine a connectivity state of a network.

13. (Amended) The system of claim 12 wherein the mechanism for evaluating the caches determines that the connectivity state of the network is true if the incoming packet counts have increased based on at least one difference in the packet counts between at least two of the caches.

14. (Amended) The system of claim 12 wherein the mechanism for evaluating the caches determines that the connectivity state of the network is false if the outgoing packet counts have increased and the incoming packet counts have not increased based on at least one difference in the packet counts between at least two of the caches.

15. (Amended) The system of claim 1 wherein the client includes a COM object, and the firing of an event results in a call by an event class object to a method of the COM object.

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23. (Amended) A computer-readable medium having computer-executable instructions for performing steps comprising:

a) receiving system information at a central service;

b) publishing an event notification in response thereto, the event notification having an event type associated therewith;

c) receiving the event notification at an event class object of a loosely coupled events database;

- d) matching the event notification with at least one client that has subscribed for event notification based on the type of event; and
- e) communicating the event notification via the event class object to each client that has subscribed therefor.

26. (Amended) The computer-readable medium of claim 23 wherein the system information includes information related to a network state.

37. (Amended) A method for providing information on a state of network connectivity, comprising, maintaining values indicative of network activity at a first time, obtaining values indicative of network activity at a second time by receiving the values without polling therefor, evaluating the differences between the values at the first time and the second time to determine the state of network connectivity, and selectively outputting the state of network connectivity.

REMARKS

The Office action dated April 9, 2001 has been carefully considered. In the Office action, claims 1, 4 and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by Lawson et al., U.S. Patent No. 6,185,613 (hereinafter Lawson). Claims 3 and 6-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lawson. Claims 2, 5, 15-17 and 23-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lawson in